ABSTRACT OF THE INVENTION

A system and method is provided for learning data values over time as they are entered by a user on a form such as a web page form. An Internet web browser can be modified to suggest previously used data values for any form field that is the same as or similar to a previously used form field. Application programs that use the web browser can gain access to previously used form field values even if they have no knowledge of the field names. Software in a web browser associates field names across different Universal Resource Locators (URLs), so that when a user enters a value into a field (e.g., username) at a first web site, that same value can be automatically suggested when the user displays a different form on a different web site that uses the same field name. The more web sites that are visited by the user, the more the software learns field values and is able to suggest likely choices for field values. For security reasons, field values are preferably not stored in the application program or on the target web site, but are instead stored locally on the client computer or at a trusted web site known to the browser. Web sites can be prevented from surreptitiously discovering suggested values because a user may be required to hit at least one keystroke before any data values are suggested. Heuristics can be used to identify and suggest values for fields, and field identifiers can be searched in a historical database, a user profile database, a common names database, and mappings to the standard vCard schema.